



National Transportation Safety Board Aviation Accident Final Report

Location:	PHILADELPHIA, PA	Accident Number:	NYC88LA085
Date & Time:	02/12/1988, 1445 EST	Registration:	N339MA
Aircraft:	MITSUBISHI MU-2B-35	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Positioning		

Analysis

THE MITSUBISHI MU-2B-35 LANDED AND DAMAGE WAS OBSERVED ON THE UNDERSIDE OF THE LEFT WING MIDWAY BETWEEN THE ENGINE AND TIP TANK AND OUTBOARD TO THE TIP TANK. FURTHER EXAMINATION OF THE WING SHOWED A BROKEN LOWER FRONT WING SPAR AND A BENT REAR LOWER WING SPAR. THE PILOT SAID HE ENCOUNTERED TURBULENCE WHILE CRUISING AT 250 KTS. HE SAID HE SLOWED TO 170 KTS AND THEN RESUMED SPEED TO 250 KTS. AFTER MITSUBISHI EXAMINED THE WING, THEY SAID THE DAMAGE WAS CAUSED BY EITHER A HARD LANDING OR LANDING WITH EXCESS FUEL IN THE TIP TANK. THEY ALSO SAID IT WAS LIKELY THAT THE AIRCRAFT HAD BEEN FLOWN SEVERAL TIMES WITH THE WING DAMAGE PRESENT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. WING,SKIN - BENT
2. WING,SPAR - BENT
3. WING,SPAR - CRACKED
4. (C) DESIGN STRESS LIMITS OF AIRCRAFT - EXCEEDED - UNKNOWN

Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	28, Male
Airplane Rating(s):	Multi-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Unknown	Last FAA Medical Exam:	07/08/1987
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	1862 hours (Total, all aircraft), 113 hours (Total, this make and model), 1146 hours (Pilot In Command, all aircraft), 114 hours (Last 90 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MITSUBISHI	Registration:	N339MA
Model/Series:	MU-2B-35 MU-2B-35	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	607
Landing Gear Type:	Retractable - Tricycle	Seats:	8
Date/Type of Last Inspection:	12/21/1987, Unknown	Certified Max Gross Wt.:	10520 lbs
Time Since Last Inspection:	57 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	3578 Hours	Engine Manufacturer:	GARRETT
ELT:	Installed, not activated	Engine Model/Series:	TPE-331-6-251
Registered Owner:	EPPS AIR SERVICE	Rated Power:	724 hp
Operator:	EPPS AIR	Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	ESMA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	2 Miles
Lowest Ceiling:	Overcast / 400 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-18°C / -18°C
Precipitation and Obscuration:			
Departure Point:	UTICA, NY (UCA)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:	1330 EST	Type of Airspace:	Class E

Airport Information

Airport:	PHILADELPHIA (PHL)	Runway Surface Type:	Asphalt
Airport Elevation:	21 ft	Runway Surface Condition:	
Runway Used:	27R	IFR Approach:	ILS
Runway Length/Width:	9500 ft / 150 ft	VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	ROBERT L HANCOCK	Report Date:	09/25/1989
Additional Participating Persons:	; PHILADELPHIA, PA		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).